



ESQL
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Earth Science Query Language (ESQL)



Drivers

- Scientist-readable query facility
- Ability to edit (e.g., add to 'where' clause)
- Not for update or formatted report generation
- Standards-based
- Fit with ECS architecture (DOF, DIM/LIM, ...)

Approach

- Late 1995: Trade study of languages (statused at IDR)
 - SQL3 recommended, although not yet standard
 - Illustra dialect as practical implementation
 - Similar findings from ESDIS/CSC study
 - Z39.50 - did not fare as strongly (query language)
- Early 1996: Endorsement of Study
 - Merge/reconciled ECS and ESDIS studies
 - Issued as draft White Paper
 - Reviewed in 2/23 Design Issues Telecon
 - Brief decision at CDR

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Approach (cont.)

- **First half 1996: Prototype implementation**
 - Designed as 'plug-in' to Java client
 - Queries built dynamically as scientist performs spatial, temporal, parameter restriction
 - Scenario: Scientist then adds further restrictions not supported by client GUI
 - Target direct to Illustra performance benchmark/deploy concurrent with EP7
 - Meanwhile SQL3 (ANSI) expected in draft (May)
- **Second half 1996: Implement/Merge with Formal Track**
 - Apply in finalized client
 - Connect to DIM/LIM
 - Adapt to SDSRV parameter-passing
- **Future Trade**
 - Evaluate ECS code breakage associated with SQL3 standard
 - Rewrites of scientist-developed SQL3 scripts